

ABSTRACT

A method that utilizes software means to meet the FCC requirement for an U-NII antenna to be an integral part of the device in which it operates, while providing wireless ready U-NII devices and CRUable U-NII radios. Enhancements are made to the system BIOS, including the inclusion of a table of PCI IDs and secret key pairs. The CRUable radio includes a pair of validation registers (VRs) and an EEPROM storing an PCI ID and secret key of an approved device. During boot up of the device, the PCI ID and secret key from the device's BIOS are compared against the PCI ID and secret key stored in the radio's EEPROM. The first comparison completes a radio-to-device authentication in the device, while the second comparison completes a device-to-radio authentication in the radio. U-NII transmission capability is enabled only when both parameters match, indicating FCC approved device-antenna-radio combination under the "integral" requirement.